COMMERCIAL KITCHEN FIRE PROTECTION HOOD SYSTEMS

On November 21, 1994, Underwriters Laboratories placed into effect the new fire test for manufactures of pre-engineered fire protection hood systems known as UL300. The UL300 fire test is a procedure written by Underwriters Laboratories to ensure that all manufacturers are performing the same fire tests in the same manner. This test established protocols that more closely resembled the way today's cooking appliances and cooking oils react with regard to the hood fire protection system.

Today's newer "high efficiency" cooking appliances along with the use of vegetable shortening as a cooking oil instead of the previous use of animal fats, has greatly altered the intensity of a fire that occurs from the ignition of these oils.

Numerous tests of dry chemical hood systems adequately demonstrated that these systems failed to extinguish fires that occurred from the ignition of today's cooking oils. With activation, the existing dry chemical systems would initially suppress the fire, but it was continually demonstrated that a reignition of the fire would occur within a very short period of time. With the contents of the fire protection system expended, the fire would increase rapidly and be out of control before fire personnel arrived.

The installation of a UL300 wet system normally requires five times more agent to suppress, cool, and prevent rekindle of the ignited cooking oils. Currently on the market, there is not a dry chemical hood fire protection system that is UL300 listed.

On May 10, 1996, the Utah Fire Prevention Board enacted an Administrative Rule that allowed existing Dry Chemical and non-UL300 wet chemical systems to remain in existence as long as the existing installation wasn't altered. It was felt that over the next few years these now noncomplying systems would slowly phase themselves out and be replaced with the new UL300 wet systems. Unfortunately, that expected phase out of the existing systems has not occurred. Dry chemical systems are now obsolete, no longer supported by the manufacturer, do not meet currently adopted code requirements, and have lost their UL Listing.

March 18, 2003, the Utah Fire Prevention Board enacted new Administrative Rules that require that all existing dry chemical hood fire protection systems and all nonUL300 wet chemical hood fire protection systems be removed or upgraded by January 1, 2006. If the system requires hydrostatic testing, internal examination, recharge or reconfiguration before January 1, 2006, it will be required to be replaced at the time of service.

If there are any further questions please feel free to call the Utah State Fire Marshals Office at 801-284-6350 and speak to Chief Deputy Brent Halladay or Email Mr. Halladay at bhallada@utah.gov